

# **BLANK PAGE**



## Indian Standard

## SPECIFICATION FOR

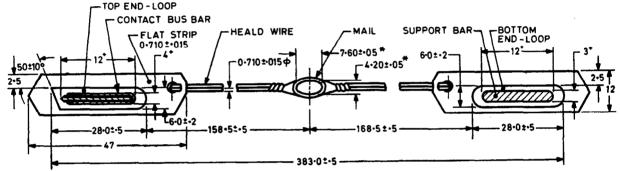
## CONTACT WIRE HEALDS FOR JUTE WEAVING

(First Revision)

1. Scope — Covers contact wire healds used in jute weaving (jute carpet backing, for example).

#### 2. Materials

- 2.1 Wire Bright, hardened and tempered steel wire with carbon content 0.35 to 0.65 percent (see C55 Mn 75 steel in schedule II of IS: 1570-1961 'Schedules for wrought steels for general engineering purposes') with the single-wire tensile strength of 110 kgf/mm², Min (as determined in accordance with IS: 1521-1960 'Method for tensile testing of steel wire').
- 2.2 Mail Hardened and tempered high-carbon, grooved steel wire or strip.
- 2.3 Flat Strip Hardened high-carbon steel sheet.
- 2.4 Solder Grade Sn 60 or higher of IS: 193-1966 'Specification for soft solder (second revision)' shall be used for soldering the flat strips of end-loops and mail to the wire.
- 3. Shape and Dimensions As shown in Fig. 1.
- 3.1 Tolerance on thickness shall be ±0.015 mm.



Note — Heald wire of 0.900 ± 0.015 mm diameter may be used at the option of the purchaser.

- \* Mail eye of other dimensions at the discretion of the purchaser.
- † Recommended values.

All dimensions in millimetres.

FIG. 1 TYPICAL CONTACT WIRE HEALD, JUTE WEAVING

4. Workmanship — Both the end-loops should be in the same plane. When the wire heald is held vertical with the top end upward, the minor axis of the mail shall be in the 'S' direction as shown in Fig. 2.

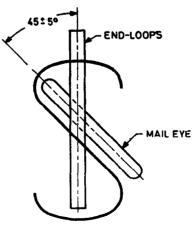


FIG. 2 DIRECTION OF MAIL EYE

Adopted 14 January 1974

@ May 1974, BIS

Gr 1

### IS: 4462 - 1974

- 4.1 The mail shall be oval in shape (see Fig. 1) and grooved at its periphery.
  - 4.1.1 The mail eye should be perfectly smooth.
- **4.2** Plating The heald wire shall be plated with commercially pure tin of 95 percent purity and the plated surface should be lustrous, smooth and free from cracks and other such flaws likely to cause yarn breakage. However, the grooves formed by two adjoining wires should be smooth and regular.
- 5. Breaking Strength Shall be 50 kgf, Min, when all the joints of the contact wire heald are subjected to a stress in a tensile strength tester at the rate of traverse 450 mm/min.
- 6. Packing After a suitable rust preventive has been applied on the contact wire healds, the healds shall be threaded through end-loops by a cotton thread of adequate strength, to form a bundle; the bundles then packed into polyethylene bags to form a package.
- 7. Marking Each bundle or package or both shall bear the following:
  - a) Number of healds in the bundle or package;
  - b) Manufacturers' name, trade-mark or initials; and
  - c) Date of manufacture.
- 7.1 Certification Marking Details available with the Bureau of Indian Standards.